

May 13, 2015

Mr. Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Docket No. 424: Interstate Reliability Project
Development & Management Plan Change Notice Request:
Addition of Permanent Fill in Three Wetlands for Transmission Line Structure Stability (Towns of Lebanon, Columbia, and Coventry) and Offsetting Reduction in Approved Permanent Wetland Fill along On-Right-of-Way Access Road (Town of Hampton)

Dear Chairman Stein:

Pursuant to Section 16-50j-62(a)(1) of the Regulations of Connecticut State Agencies (RCSA) and Sections 4 and 7.2 of the *Development and Management (D&M) Plan for the Construction of the Interstate Reliability Project (Project, Interstate) New 345-kV Transmission Lines and Related Minor Modifications to Adjacent Lines*, The Connecticut Light and Power Company (CL&P) doing business as Eversource Energy (Eversource) seeks the Connecticut Siting Council's (Council's) review and approval of this D&M Plan Change request to allow Eversource to:

- Leave in place permanently, for transmission line structure stability, a total of 900 square feet of fill in wetlands at three 345-kilovolt (kV) transmission line structure work pads (Structure 4 in the Town of Lebanon, Structure 22 in the Town of Columbia and Structure 32 in the Town of Coventry; all located on Eversource-owned properties); and
- Offset this proposed 900-square-foot permanent water resource impact by eliminating a portion of a previously-approved permanent access road across a large wetland in the Town of Hampton; the elimination of this permanent access road segment will avoid 1,324 square feet of permanent water resource impacts.

To retain the permanent fill at the work pads for Structures 4, 22, and 32, Eversource requests that the Council approve this site-specific change to the D&M Plan, Volume 1, Section 3.5.2 (page 29), which states: "All work pads located in wetlands will be removed." As described further below and summarized in Table 1, the approval of this D&M Plan Change will have a net beneficial effect by decreasing, by approximately 424 square feet, the permanent water resource impacts associated with the Project.

The retention of the permanent fill at the work pads for Structures 4, 22, and 32 and the elimination of the permanent access road in the Town of Hampton was reviewed and approved by the Connecticut Department of Energy and Environmental Protection (CT DEEP) and the U.S. Army Corps of Engineers (USACE). Copies of approvals, including Mapsheets, from these agencies are included in Attachment A.

Proposed Permanent Fill for Structure Stability

In 2015, Eversource construction personnel conducted an inventory of the new 345-kV transmission line structures and work pads. As a result of this inventory, Eversource identified three locations (Structures 4, 22, and 32), where the new 345-kV structures were positioned on slopes, near the edge of the work pads.

In these areas, Eversource determined that the temporary fill used to stabilize the work pads during construction must remain to maintain the permanent stability of the three structures. The locations of each of these structures is summarized, as follows:

- Structure 4. Structure 4 is located in an upland area, adjacent to and upslope of wetland W20-4, a large wetland that extends linearly along the Eversource right-of-way (ROW) and is characterized as having low functions and values. There are no streams or vernal pools associated with this wetland.

Because Structure 4 is located very close to the boundary of wetland W20-4, Eversource anticipated, during the Project planning process, that a small portion of wetland W20-4 would have to be temporarily filled to create a stable work pad for the activities required to safely install Structure 4. The fill at the Structure 4 work pad is illustrated on the D&M Plan, Volume 3, Mapsheet 1 (refer to "Limit of Disturbance" at the work pad).

- Structures 22 and 32. Both Structures 22 and 32 are located on slopes. Accordingly, Eversource anticipated that grading and filling would be required to create safe work pads for the installation of both of these structures. This was also reflected in the D&M Plan (refer to Volume 3, Mapsheets 4 and 6, respectively).

As shown on the D&M Plan maps, all of wetland W20-22, a small, linear wetland located downslope of Structure 22, and a portion of wetland W20-29, a linear wetland located downslope of Structure 32, were filled to create the structure work pads. This fill was expected to be temporary. Both of these wetlands were identified as having low functions and values; and neither is associated with a stream or contains a vernal pool.

As described above, after the installation of Structures 4, 22 and 32, Eversource's engineering review revealed unanticipated concerns with the long-term stability of the structure foundations, due to their close proximity to the identified wetlands, and the slope and soil conditions present in the vicinity of each structure. These concerns can be addressed effectively by leaving in place the fill material for each of the structure work pads on the downslope side of the new structure foundations. However, leaving the work pad fills in these locations will affect a wetland at each structure site.

As summarized in Table 1, Eversource proposes to leave 150 square feet of the previously-approved temporary fill in W20-4, and all of the previously-approved temporary fill in W20-22 and W20-29. Combined, the fill at the three structure sites would increase the Project's permanent wetland impacts by a total of 900 square feet.

Proposed Elimination of Permanent Access Road Segment in Wetland (Permanent Fill Reduction)

To compensate for the 900-square-foot increase in permanent water resource impacts, Eversource proposes to eliminate an approximately 75-foot-long segment of previously-approved permanent access road and an associated approved permanent culvert along the ROW west of and adjacent to State Route 97 (Pudding Hill Road), near Structure 140, in the Town of Hampton (refer to D&M Plan Volume 3, Mapsheet 27). This access road segment crosses a portion of wetland W20-103.

Wetland W20-103, a large wetland extending along and adjacent to the ROW west of State Route 97, is characterized as having moderate wetland functions and values and contains an intermittent watercourse (S20-36) between Structures 139 and 140 (refer to Table 1 and Mapsheet 27). No vernal pools are associated with this wetland.

Table 1
Summary of Permitted and Proposed Water Resource Impacts: W20-4 (Town of Lebanon), W20-22 (Town of Columbia), W20-29 (Town of Coventry) and W20-103 (Town of Hampton)

Town / Str. No. / D&M Plan Mapsheet No. (Project Work Site Type)	Wetland	Wetland Type	Wetland Functions / Values	Watercourse	Vernal Pool	Water Resource Impacts (sq. ft.):			
						Approved Temp. Fill	Approved Perm. Fill	Proposed Perm. Fill	Change in Perm. Fill
Areas of Proposed Increase in Permanent Fill									
Lebanon / Structure 4 / Mapsheet 1 (Work Pad)	W20-4	PSS/PFO	Low	No	No	2,315*	0	150	+150
Columbia / Structure 22 / Mapsheet 4 (Work Pad)	W20-22	PSS	Low	No	No	160	0	160	+160
Coventry / Structure 32 / Mapsheet 6 (Work Pad)	W20-29	PFO	Low	No	No	590	0	590	+590
Subtotal									+900
Area of Proposed Decrease in Permanent Fill									
Hampton / Mapsheet 55 (Access Road with Permanent Culvert)	W20-103	PFO, PSS	Moderate	S20-36	No	0	3,867**	2,543	-1,324
Subtotal									-1,324
TOTAL CHANGE									-424

*Note: Of the 2,315 square feet of approved temporary fill in wetland W20-4, only 863 square feet is associated with the work pad for Structure 4. The remaining 1,452 square feet is associated with the work pad for Structure 5. All of the temporary wetland fill at the Structure 5 work pad, as well as 713 square feet of the temporary fill in wetland W20-4 at the Structure 4 work pad, will be removed as part of Project restoration.

**Note: Eversource does not propose to modify the placement of approved permanent fill within a second permanent access road crossing of wetland W20-103, located west of Structure 140, and including an approved permanent culvert crossing of Stream S20-36.

Mr. Stein
May 13, 2015
Page 4

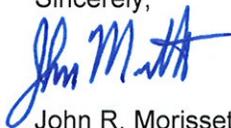
To reach Structure 140 and other parts of the ROW during construction, Eversource's contractor installed a temporary access road segment that interconnects to State Route 97, crossing the 75-foot-long segment of wetland W20-103. During Project restoration, this temporary access road segment will be removed and the affected area of wetland W20-103 will be returned to approximate pre-construction conditions¹. As such, all Project-related impacts to this portion of wetland W20-103 will be temporary.

As illustrated on the D&M Plan, Volume 3, Mapsheet 27, the Connecticut Department of Transportation (ConnDOT; Line List No. 30253) is the owner of most of the property west of State Route 97 where Eversource proposes to eliminate the permanent new culvert and 75-foot-long section of on-ROW access road. ConnDOT indicated that the elimination of the permanent on-ROW access road extending west from State Route 97 would avoid safety (line-of-sight) concerns that otherwise would have been associated with a new access to the state highway. A small portion of the permanent access road to be eliminated is located within Eversource's easement on private property (Line List No. 30252, Shaw). Eversource notified the landowner that this portion of the previously planned permanent access road will not be built.

By not constructing the approved permanent access road and culvert across wetland W20-103 in this location, the Project's permanent impacts to water resources will be reduced by 1,324 square feet. The elimination of the 1,324 square feet of permanent impact in wetland W20-103 more than offsets the proposed permanent fill at Structures 4, 22 and 32, and decreases the Project's overall permanent impact to water resources by 424 square feet.

Should you have any questions or required more information regarding this request, please do not hesitate to contact me via e-mail at john.morissette@eversource.com or telephone at (860) 728-4532.

Sincerely,



John R. Morissette
Project Manager – Transmission Siting

Attachment A: Copies of Approvals from USACE and CT DEEP

Cc: Service List
Ms. Joyce Okunuk, First Selectman, Town of Lebanon
Mr. John Elsesser, Town Manager, Town of Coventry
Ms. Natasha Nau, Town Administrator, Town of Columbia
Mr. Allan Cahill, First Selectman, Town of Hampton

¹ Note: This area of W20-103 is located beneath Eversource's existing 345-kV line (i.e., the 330 Line), within the portion of the ROW that has been managed for vegetation growth consistent with overhead transmission line operation. For long-term ROW management and transmission line maintenance, Eversource will access the ROW west of State Route 97 from the west, using on- and off-ROW access roads. As a result, permanent access from State Route 97 will not be required.

ATTACHMENT A

**COPIES OF CORRESPONDENCE FROM THE USACE AND CT DEEP APPROVING
THE PROPOSED PERMANENT FILL AND OFF-SETTING ELIMINATION OF A
PORTION OF A PREVIOUSLY-APPROVED PERMANENT ACCESS ROAD**



The Connecticut Light and Power Company
P.O. Box 270
Hartford, CT 06141

Attn: Robert Deptula

Re: Request for Technical Plan Revision

Permit No.: WQC-201205697
Project: Interstate Reliability Project
USACOE No.: NAE-2008-1671
Towns: Lebanon, Coventry, Columbia, Hampton

Dear Mr. Deptula:

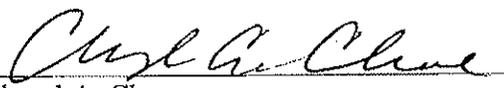
The department has completed a review of your April 21, 2015 request for a technical plan revision to the above referenced Clean Water Act Section 401 Water Quality Certification. The request involves your need to convert 900 square feet of temporary wetland impact to permanent wetland impact.

You had identified three separate locations where line support structures were located on steep slopes where adjacent temporary work pads could serve to permanently provide needed stability for those structures. All of the affected wetland sites were described as having low function and value in your application, and none are located at watercourses or vernal pools. To compensate for this additional wetland impact, you propose to convert 1324 square feet of permitted permanent wetland fill to temporary fill. This would occur at a culverted access road watercourse crossing that you have determined is no longer permanently necessary. The wetlands and watercourse at this location were described as having moderate function/value in your application.

Your request for technical plan revision is hereby approved. The above modification shall be in accordance with Mapsheets 2, 8, 12, and 55 of 134, dated 11/25/2013 and revised to 4/13/015, by Burns and McDonnell, as attached to your April 21, 2015 correspondence.

If you have questions regarding this matter please contact Doug Hoskins at (860) 424-4192, douglas.hoskins@ct.gov. All correspondence regarding this permit should reference the permit numbers identified above and be addressed to Doug Hoskins, Inland Water Resources Division, Bureau of Water Protection and Land Reuse, Department of Energy and Environmental Protection, 79 Elm St., Hartford, CT 06106-5127.

May 7, 2015
Date


Cheryl A. Chase
Director
Inland Water Resources Division
Bureau of Water Protection and Land Reuse

WQC-201205697
CL&P / Interstate Reliability Project
Lebanon, Coventry, Columbia, Hampton
Page 2 of 2

CC:DH

cc: For the town of Lebanon, Coventry, Columbia, Hampton:
Mayor/First Selectman
Conservation Commission
Inland Wetland Agency
Planning & Zoning Commission
Susan Lee, New England District, USACE, 696 Virginia Road, Concord MA 01742-2751
Chris Fritz, Burns & McDonnell, 108 Leigus Rd., Suite 1100, Wallingford, CT 06492



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

May 5, 2015

Regulatory Division
File No. **NAE-2008-1671**

Attn: Mr. Robert Deptula
Eversource Energy
107 Selden Street
Berlin, CT 06037

Dear Mr. Deptula:

In accordance with your request dated April 24, 2015, your Department of the Army permit number NAE-2008-1671, issued on February 12, 2014, and which authorized fill in wetlands/waters for construction of the Interstate Reliability Project (IRP), is hereby modified. This modification authorizes additional permanent fill and acknowledges temporary fill on the IRP as described below.

1. Retain and maintain an existing 150 SF area of temporary gravel fill as permanent fill in wetland W20-4 adjacent to Structure 4 to provide slope stability for the structure foundation at Structure 4 in Lebanon, CT.
2. Retain and maintain an existing 160 SF area of temporary gravel fill as permanent fill in wetlands W20-22 adjacent to Structure 22 to provide slope stability for the structure foundation at Structure 22 in Columbia, CT.
3. Retain and maintain an existing 590 SF area of temporary gravel fill as permanent fill in wetlands W20-29 adjacent to Structure 32 to provide slope stability for the structure foundation at Structure 32 in Coventry, CT.
4. Maintain 1,324 SF of existing temporary fill (placed timber mats at road flare area) area in wetland W20-103 in Hampton, CT; this modification acknowledges that temporary fill was placed instead of the originally authorized permanent fill and culvert construction. No permanent culvert will be constructed at wetland W20-103 at the road flare area after removal of the 1,324 SF temporary fill.

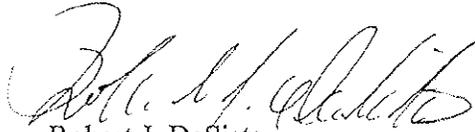
The modified work is as described and shown on the enclosed project plans (Mapsheets 2, 8, 12 and 55 of 134) entitled "INTERSTATE RELIABILITY PROJECT", four (4) sheets, all sheets dated "11/25/2013, Revised "4/13/2015".

The conditions of the original permit remain in full force and effect.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

If you have any questions, please contact Susan Lee of my staff at (978) 318-8494.

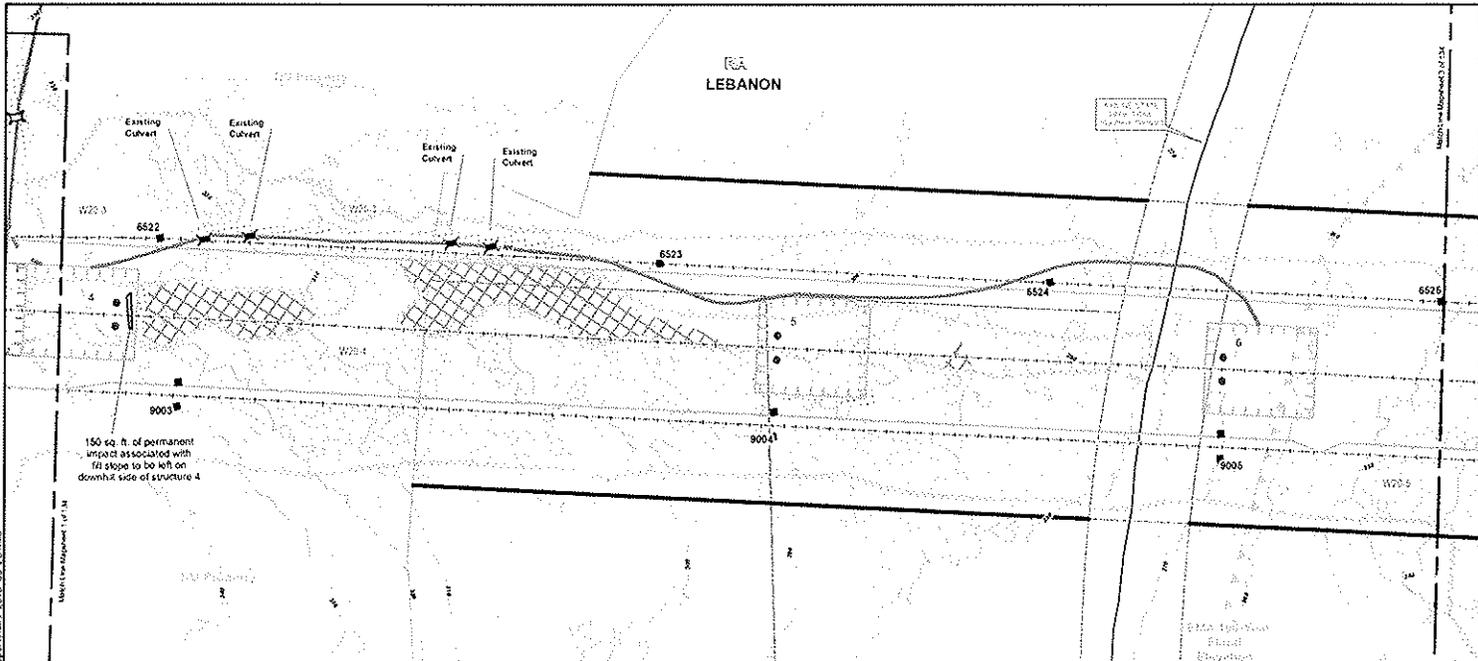
Sincerely,

A handwritten signature in black ink, appearing to read "R. J. DeSista". The signature is fluid and cursive, with a large initial "R" and "D".

Robert J. DeSista
Chief, Permits and Enforcement Branch
Regulatory Division

Enclosures

LEBANON



Map Location

Typical Cross Section

Impacts

- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Glazing Impact
- Forested Wetland (FFG) Clearing

Connecticut Light & Power
 A Connecticut Electric Company

Prepared by
Burns & McDonnell
 ENGINEERS

Scale: 1" = 100' (not to scale)

Existing Conditions

- Existing Transmission Line
- Existing ROW
- Existing Transmission Structures
- Existing Access Road
- Wetland
- State Wetland
- Perennial Stream
- Intermittent Stream
- Vernal Pool
- Existing Tree Line
- Full Parcel
- Property Lines
- Zoning Description

Proposed Conditions

- Proposed Transmission Line
- Replaced Distribution Line
- Proposed Transmission Structure
- Distribution Structure to be removed
- New or Replaced Guy Wire & Anchor
- Temporary Work Pad
- Temporary Work Pad & Guard Structure
- Temporary Piling Pad
- Temporary Road Flare
- Max Span

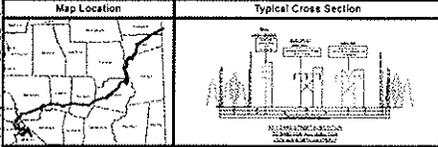
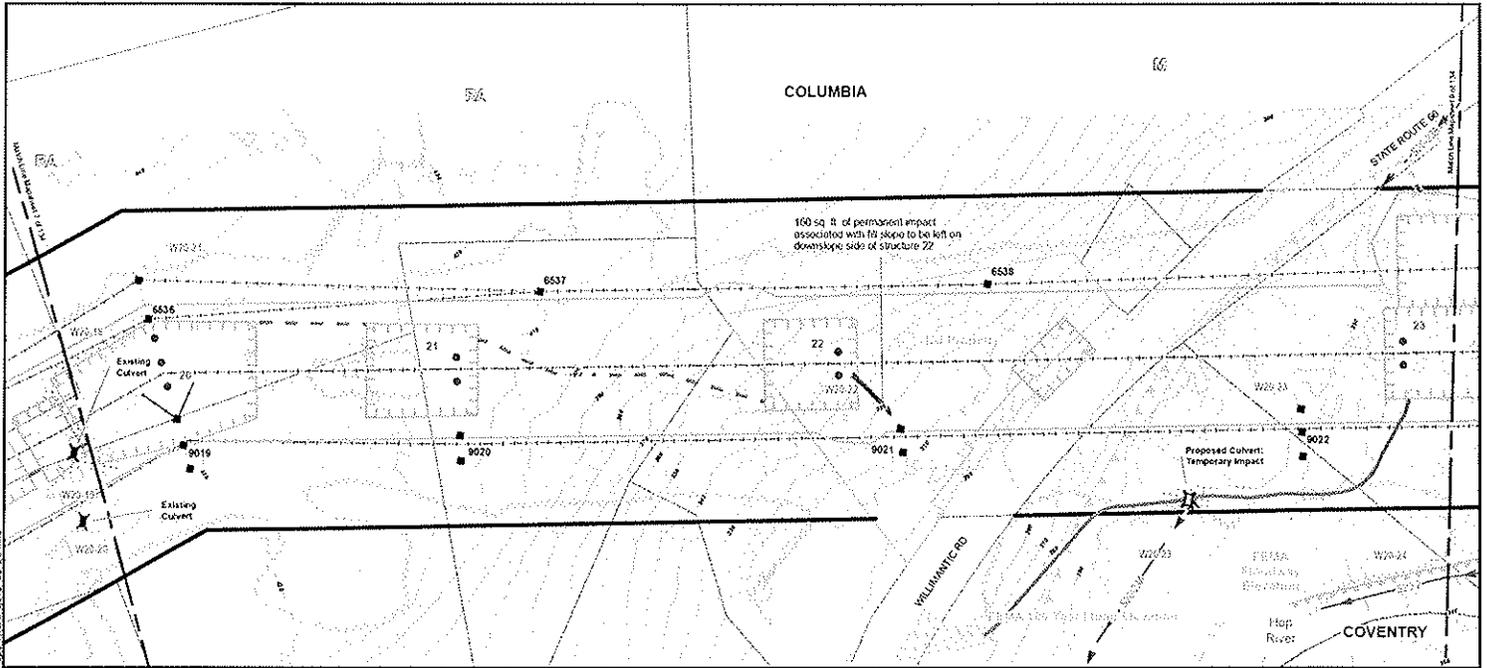
WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

Existing Water Resource Characteristics				Water Resource Impacts (sq ft)				Forested Wetland Impacts (sq ft)	
Wetland/Stream Type	Area (sq ft)	Flow (cfs)	Flow (ft³/s)	Temporary	Permanent	Structure Removal	Actual Forest	Area (sq ft)	Area (sq ft)
W22.3	10,000	100	100	200	200	100	100	100	100
W22.4	10,000	100	100	200	200	100	100	100	100
W22.5	10,000	100	100	200	200	100	100	100	100
W22.6	10,000	100	100	200	200	100	100	100	100
W22.7	10,000	100	100	200	200	100	100	100	100
W22.8	10,000	100	100	200	200	100	100	100	100
W22.9	10,000	100	100	200	200	100	100	100	100
W22.10	10,000	100	100	200	200	100	100	100	100
W22.11	10,000	100	100	200	200	100	100	100	100
W22.12	10,000	100	100	200	200	100	100	100	100
W22.13	10,000	100	100	200	200	100	100	100	100
W22.14	10,000	100	100	200	200	100	100	100	100
W22.15	10,000	100	100	200	200	100	100	100	100
W22.16	10,000	100	100	200	200	100	100	100	100
W22.17	10,000	100	100	200	200	100	100	100	100
W22.18	10,000	100	100	200	200	100	100	100	100
W22.19	10,000	100	100	200	200	100	100	100	100
W22.20	10,000	100	100	200	200	100	100	100	100
W22.21	10,000	100	100	200	200	100	100	100	100
W22.22	10,000	100	100	200	200	100	100	100	100
W22.23	10,000	100	100	200	200	100	100	100	100
W22.24	10,000	100	100	200	200	100	100	100	100
W22.25	10,000	100	100	200	200	100	100	100	100
W22.26	10,000	100	100	200	200	100	100	100	100
W22.27	10,000	100	100	200	200	100	100	100	100
W22.28	10,000	100	100	200	200	100	100	100	100
W22.29	10,000	100	100	200	200	100	100	100	100
W22.30	10,000	100	100	200	200	100	100	100	100
W22.31	10,000	100	100	200	200	100	100	100	100
W22.32	10,000	100	100	200	200	100	100	100	100
W22.33	10,000	100	100	200	200	100	100	100	100
W22.34	10,000	100	100	200	200	100	100	100	100
W22.35	10,000	100	100	200	200	100	100	100	100
W22.36	10,000	100	100	200	200	100	100	100	100
W22.37	10,000	100	100	200	200	100	100	100	100
W22.38	10,000	100	100	200	200	100	100	100	100
W22.39	10,000	100	100	200	200	100	100	100	100
W22.40	10,000	100	100	200	200	100	100	100	100
W22.41	10,000	100	100	200	200	100	100	100	100
W22.42	10,000	100	100	200	200	100	100	100	100
W22.43	10,000	100	100	200	200	100	100	100	100
W22.44	10,000	100	100	200	200	100	100	100	100
W22.45	10,000	100	100	200	200	100	100	100	100
W22.46	10,000	100	100	200	200	100	100	100	100
W22.47	10,000	100	100	200	200	100	100	100	100
W22.48	10,000	100	100	200	200	100	100	100	100
W22.49	10,000	100	100	200	200	100	100	100	100
W22.50	10,000	100	100	200	200	100	100	100	100
W22.51	10,000	100	100	200	200	100	100	100	100
W22.52	10,000	100	100	200	200	100	100	100	100
W22.53	10,000	100	100	200	200	100	100	100	100
W22.54	10,000	100	100	200	200	100	100	100	100
W22.55	10,000	100	100	200	200	100	100	100	100
W22.56	10,000	100	100	200	200	100	100	100	100
W22.57	10,000	100	100	200	200	100	100	100	100
W22.58	10,000	100	100	200	200	100	100	100	100
W22.59	10,000	100	100	200	200	100	100	100	100
W22.60	10,000	100	100	200	200	100	100	100	100
W22.61	10,000	100	100	200	200	100	100	100	100
W22.62	10,000	100	100	200	200	100	100	100	100
W22.63	10,000	100	100	200	200	100	100	100	100
W22.64	10,000	100	100	200	200	100	100	100	100
W22.65	10,000	100	100	200	200	100	100	100	100
W22.66	10,000	100	100	200	200	100	100	100	100
W22.67	10,000	100	100	200	200	100	100	100	100
W22.68	10,000	100	100	200	200	100	100	100	100
W22.69	10,000	100	100	200	200	100	100	100	100
W22.70	10,000	100	100	200	200	100	100	100	100
W22.71	10,000	100	100	200	200	100	100	100	100
W22.72	10,000	100	100	200	200	100	100	100	100
W22.73	10,000	100	100	200	200	100	100	100	100
W22.74	10,000	100	100	200	200	100	100	100	100
W22.75	10,000	100	100	200	200	100	100	100	100
W22.76	10,000	100	100	200	200	100	100	100	100
W22.77	10,000	100	100	200	200	100	100	100	100
W22.78	10,000	100	100	200	200	100	100	100	100
W22.79	10,000	100	100	200	200	100	100	100	100
W22.80	10,000	100	100	200	200	100	100	100	100
W22.81	10,000	100	100	200	200	100	100	100	100
W22.82	10,000	100	100	200	200	100	100	100	100
W22.83	10,000	100	100	200	200	100	100	100	100
W22.84	10,000	100	100	200	200	100	100	100	100
W22.85	10,000	100	100	200	200	100	100	100	100
W22.86	10,000	100	100	200	200	100	100	100	100
W22.87	10,000	100	100	200	200	100	100	100	100
W22.88	10,000	100	100	200	200	100	100	100	100
W22.89	10,000	100	100	200	200	100	100	100	100
W22.90	10,000	100	100	200	200	100	100	100	100
W22.91	10,000	100	100	200	200	100	100	100	100
W22.92	10,000	100	100	200	200	100	100	100	100
W22.93	10,000	100	100	200	200	100	100	100	100
W22.94	10,000	100	100	200	200	100	100	100	100
W22.95	10,000	100	100	200	200	100	100	100	100
W22.96	10,000	100	100	200	200	100	100	100	100
W22.97	10,000	100	100	200	200	100	100	100	100
W22.98	10,000	100	100	200	200	100	100	100	100
W22.99	10,000	100	100	200	200	100	100	100	100
W22.100	10,000	100	100	200	200	100	100	100	100

CONNECTICUT LIGHT AND POWER | INTERSTATE RELIABILITY PROJECT

Date: 11/25/2013 | Drawn: LD | Revised: 4/13/2015 | Sheet 2 of 134

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Impacts

- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Grading Impact
- Forested Wetland (P/F) Clearing

Prepared by
 Burns & McDonnell
 21410 11th Street, Suite 100
 Columbia, CT 06223-1100
 Phone: 860.439.1100
 Fax: 860.439.1101
 Email: ct@burnsmcdonnell.com

Existing Conditions

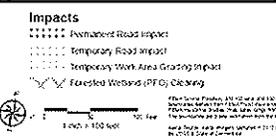
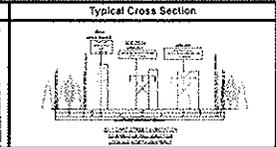
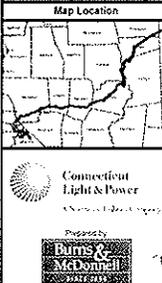
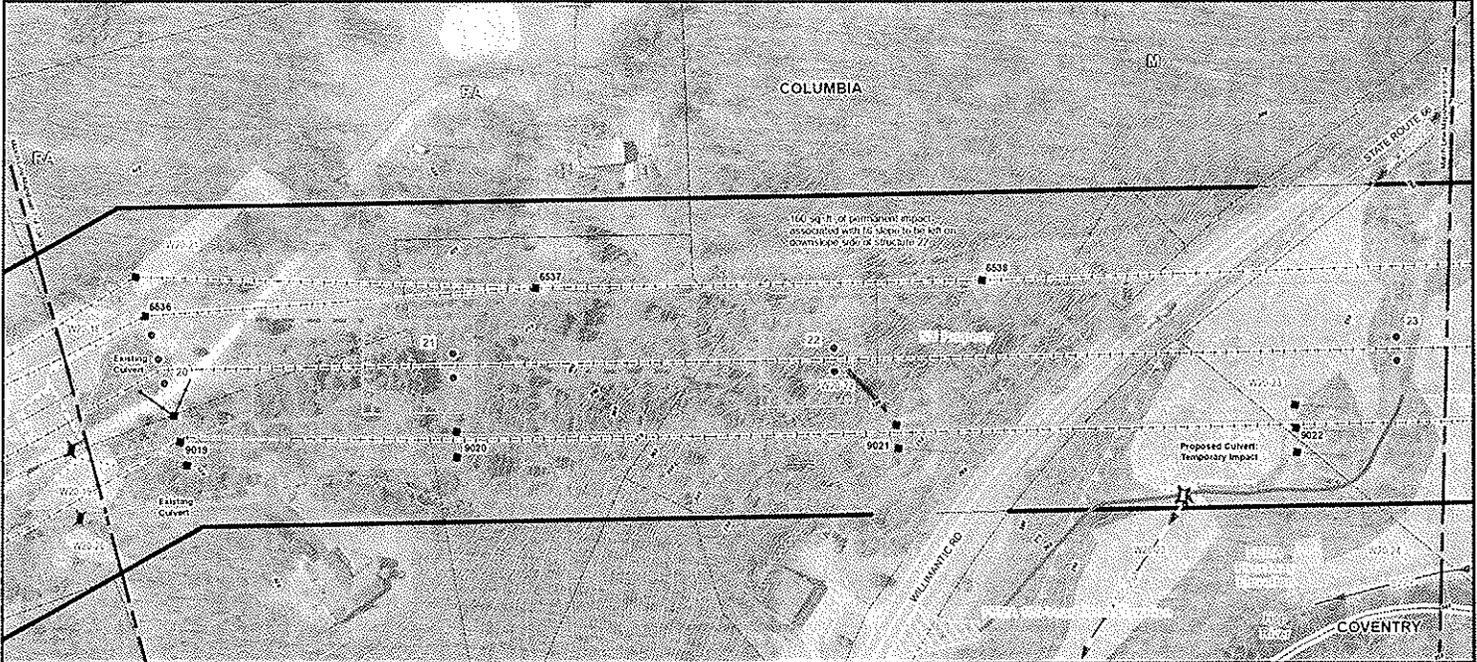
- Existing Transmission Line
- Existing ROW
- Existing Transmission Structure
- Existing Access Road
- Wetland
- State Wetland
- Perennial Stream
- Intermittent Stream
- Wetland Pool
- Existing Tree Line
- No Parcel
- Property Lines
- Zoning Description

Proposed Conditions

- Proposed Transmission Line
- Relocated Distribution Line
- Proposed Transmission Structure
- Distribution Structure to be removed
- New Access Road
- New or Rebuilt Guy Wire & Anchor
- Temporary Work Pad
- Temporary Work Pad & Guard Structure
- Temporary Pulling Pad
- Temporary Road Flare
- Mill Span

WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

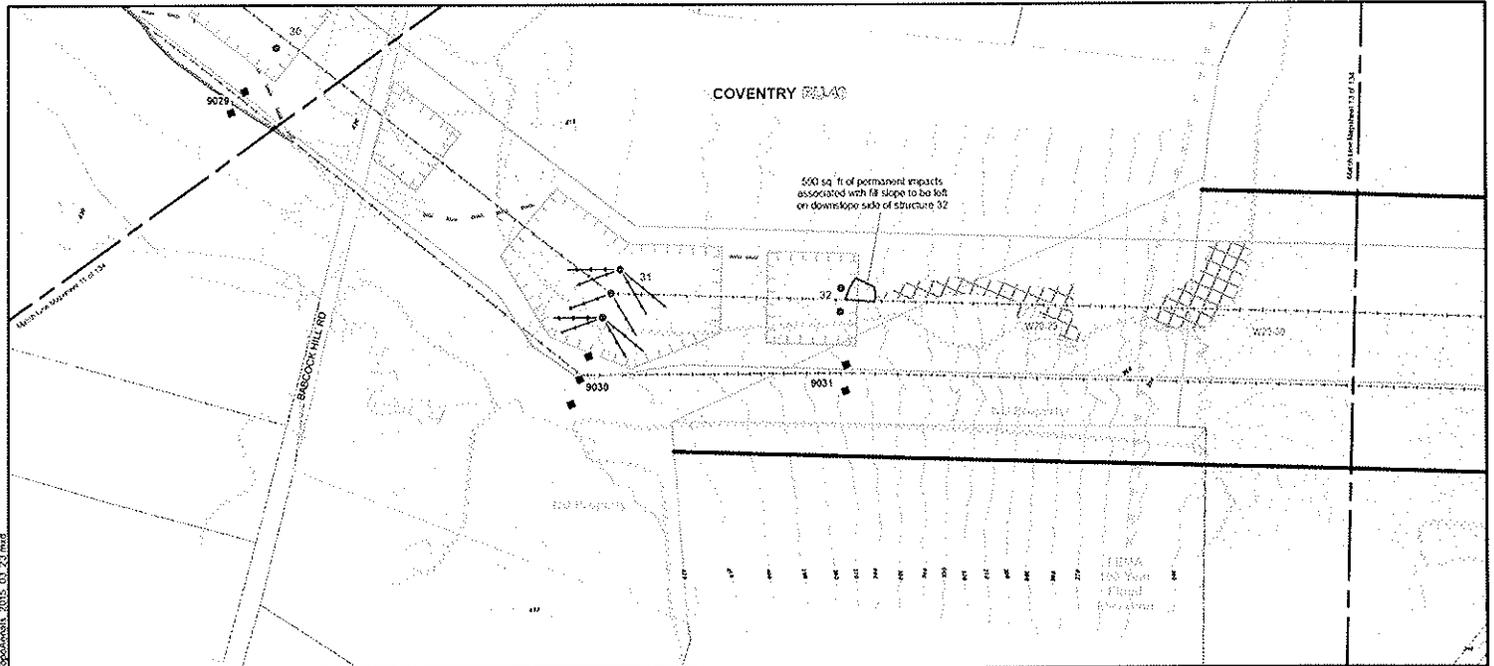
Wetland ID	Existing Water Resource Characteristics			Water Resource Impacts (sq ft)				Forest Wetland Vegetation Clearing Savings (Secondary Property)
	Wetland Type	Wetland Condition	Wetland Area (sq ft)	Temporary	Clearing	Remediation	Net Impact	
W20-14	PSS	Low	127	127	0	0	0	0
W20-19	PSS	Low	80	80	0	0	0	0
W20-20	PSS	Low	55	55	0	0	0	0
W20-21	P/O-PSS	Low	10	10	0	0	0	0
W20-22	PSS	Low	10	10	0	0	0	0
W20-23	PSS	Low	10	10	0	0	0	0
W20-24	PSS	Low	10	10	0	0	0	0
W20-25	PSS	Low	10	10	0	0	0	0
W20-26	PSS	Low	10	10	0	0	0	0
W20-27	PSS	Low	10	10	0	0	0	0
W20-28	PSS	Low	10	10	0	0	0	0
W20-29	PSS	Low	10	10	0	0	0	0
W20-30	PSS	Low	10	10	0	0	0	0
W20-31	PSS	Low	10	10	0	0	0	0
W20-32	PSS	Low	10	10	0	0	0	0
W20-33	PSS	Low	10	10	0	0	0	0
W20-34	PSS	Low	10	10	0	0	0	0
W20-35	PSS	Low	10	10	0	0	0	0
W20-36	PSS	Low	10	10	0	0	0	0
W20-37	PSS	Low	10	10	0	0	0	0
W20-38	PSS	Low	10	10	0	0	0	0
W20-39	PSS	Low	10	10	0	0	0	0
W20-40	PSS	Low	10	10	0	0	0	0
W20-41	PSS	Low	10	10	0	0	0	0
W20-42	PSS	Low	10	10	0	0	0	0
W20-43	PSS	Low	10	10	0	0	0	0
W20-44	PSS	Low	10	10	0	0	0	0
W20-45	PSS	Low	10	10	0	0	0	0
W20-46	PSS	Low	10	10	0	0	0	0
W20-47	PSS	Low	10	10	0	0	0	0
W20-48	PSS	Low	10	10	0	0	0	0
W20-49	PSS	Low	10	10	0	0	0	0
W20-50	PSS	Low	10	10	0	0	0	0
W20-51	PSS	Low	10	10	0	0	0	0
W20-52	PSS	Low	10	10	0	0	0	0
W20-53	PSS	Low	10	10	0	0	0	0
W20-54	PSS	Low	10	10	0	0	0	0
W20-55	PSS	Low	10	10	0	0	0	0
W20-56	PSS	Low	10	10	0	0	0	0
W20-57	PSS	Low	10	10	0	0	0	0
W20-58	PSS	Low	10	10	0	0	0	0
W20-59	PSS	Low	10	10	0	0	0	0
W20-60	PSS	Low	10	10	0	0	0	0
W20-61	PSS	Low	10	10	0	0	0	0
W20-62	PSS	Low	10	10	0	0	0	0
W20-63	PSS	Low	10	10	0	0	0	0
W20-64	PSS	Low	10	10	0	0	0	0
W20-65	PSS	Low	10	10	0	0	0	0
W20-66	PSS	Low	10	10	0	0	0	0
W20-67	PSS	Low	10	10	0	0	0	0
W20-68	PSS	Low	10	10	0	0	0	0
W20-69	PSS	Low	10	10	0	0	0	0
W20-70	PSS	Low	10	10	0	0	0	0
W20-71	PSS	Low	10	10	0	0	0	0
W20-72	PSS	Low	10	10	0	0	0	0
W20-73	PSS	Low	10	10	0	0	0	0
W20-74	PSS	Low	10	10	0	0	0	0
W20-75	PSS	Low	10	10	0	0	0	0
W20-76	PSS	Low	10	10	0	0	0	0
W20-77	PSS	Low	10	10	0	0	0	0
W20-78	PSS	Low	10	10	0	0	0	0
W20-79	PSS	Low	10	10	0	0	0	0
W20-80	PSS	Low	10	10	0	0	0	0
W20-81	PSS	Low	10	10	0	0	0	0
W20-82	PSS	Low	10	10	0	0	0	0
W20-83	PSS	Low	10	10	0	0	0	0
W20-84	PSS	Low	10	10	0	0	0	0
W20-85	PSS	Low	10	10	0	0	0	0
W20-86	PSS	Low	10	10	0	0	0	0
W20-87	PSS	Low	10	10	0	0	0	0
W20-88	PSS	Low	10	10	0	0	0	0
W20-89	PSS	Low	10	10	0	0	0	0
W20-90	PSS	Low	10	10	0	0	0	0
W20-91	PSS	Low	10	10	0	0	0	0
W20-92	PSS	Low	10	10	0	0	0	0
W20-93	PSS	Low	10	10	0	0	0	0
W20-94	PSS	Low	10	10	0	0	0	0
W20-95	PSS	Low	10	10	0	0	0	0
W20-96	PSS	Low	10	10	0	0	0	0
W20-97	PSS	Low	10	10	0	0	0	0
W20-98	PSS	Low	10	10	0	0	0	0
W20-99	PSS	Low	10	10	0	0	0	0
W20-100	PSS	Low	10	10	0	0	0	0



- Existing Conditions**
- Existing Transmission Line
 - Existing ROW
 - Existing Transmission Structures
 - Existing Access Road
 - Wetland
 - State Wetland
 - Perennial Stream
 - Intermittent Stream
 - Verbal Pole
 - Existing Tree Line
 - Lot Lines
 - Property Lines
 - Zoning Description
- Proposed Conditions**
- Proposed Transmission Line
 - Revised Distribution Line
 - Proposed Transmission Structure
 - Distribution Structure to be removed
 - New Access Road
 - New or Replaced Guy Wire & Anchor
 - Temporary Work Pad
 - Temporary Work Pad & Guard Structure
 - Temporary Pulling Pad
 - Temporary Road Pad
 - Max Span

WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

Watershed Name (S&P #)	Watershed Area (Acres)	Watershed Type	Watershed Elevation (ft)	Watershed Slope (%)	Water Resource Impacts (WRI)				Proposed Wetland Impacts (Secondary Impacts)
					Temporary	Permanent	Wetland	Other	
0020-10	100	PS	Low	30	100	0	0	0	0
0020-19	100	PS	Low	30	100	0	0	0	0
0020-20	100	PS	Low	30	100	0	0	0	0
0020-21	100	PS	Low	30	100	0	0	0	0
0020-22	100	PS	Low	30	100	0	0	0	0
0020-23	100	PS	Low	30	100	0	0	0	0
0020-24	100	PS	Low	30	100	0	0	0	0
0020-25	100	PS	Low	30	100	0	0	0	0
0020-26	100	PS	Low	30	100	0	0	0	0
0020-27	100	PS	Low	30	100	0	0	0	0
0020-28	100	PS	Low	30	100	0	0	0	0
0020-29	100	PS	Low	30	100	0	0	0	0
0020-30	100	PS	Low	30	100	0	0	0	0
0020-31	100	PS	Low	30	100	0	0	0	0
0020-32	100	PS	Low	30	100	0	0	0	0
0020-33	100	PS	Low	30	100	0	0	0	0
0020-34	100	PS	Low	30	100	0	0	0	0
0020-35	100	PS	Low	30	100	0	0	0	0
0020-36	100	PS	Low	30	100	0	0	0	0
0020-37	100	PS	Low	30	100	0	0	0	0
0020-38	100	PS	Low	30	100	0	0	0	0
0020-39	100	PS	Low	30	100	0	0	0	0
0020-40	100	PS	Low	30	100	0	0	0	0
0020-41	100	PS	Low	30	100	0	0	0	0
0020-42	100	PS	Low	30	100	0	0	0	0
0020-43	100	PS	Low	30	100	0	0	0	0
0020-44	100	PS	Low	30	100	0	0	0	0
0020-45	100	PS	Low	30	100	0	0	0	0
0020-46	100	PS	Low	30	100	0	0	0	0
0020-47	100	PS	Low	30	100	0	0	0	0
0020-48	100	PS	Low	30	100	0	0	0	0
0020-49	100	PS	Low	30	100	0	0	0	0
0020-50	100	PS	Low	30	100	0	0	0	0



Map Location

Typical Cross Section

Impacts

- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Grading Impact
- Forested Wetland (PFO) Clearing

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Prepared by
Burns & McDonnell
WETA 4311

Scale: 1 inch = 100 feet

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Fax: 203.763.1001
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Existing Conditions

- Existing Transmission Line
- Existing ROW
- Existing Transmission Structures
- Existing Access Road
- Wetland
- State Wetland
- Perennial Stream
- Intermittent Stream
- Vernal Pool
- Existing Tree Line
- Lot Parcel
- Property Lines
- Zoning Description

Proposed Conditions

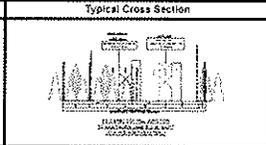
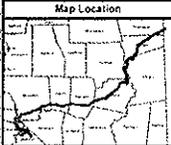
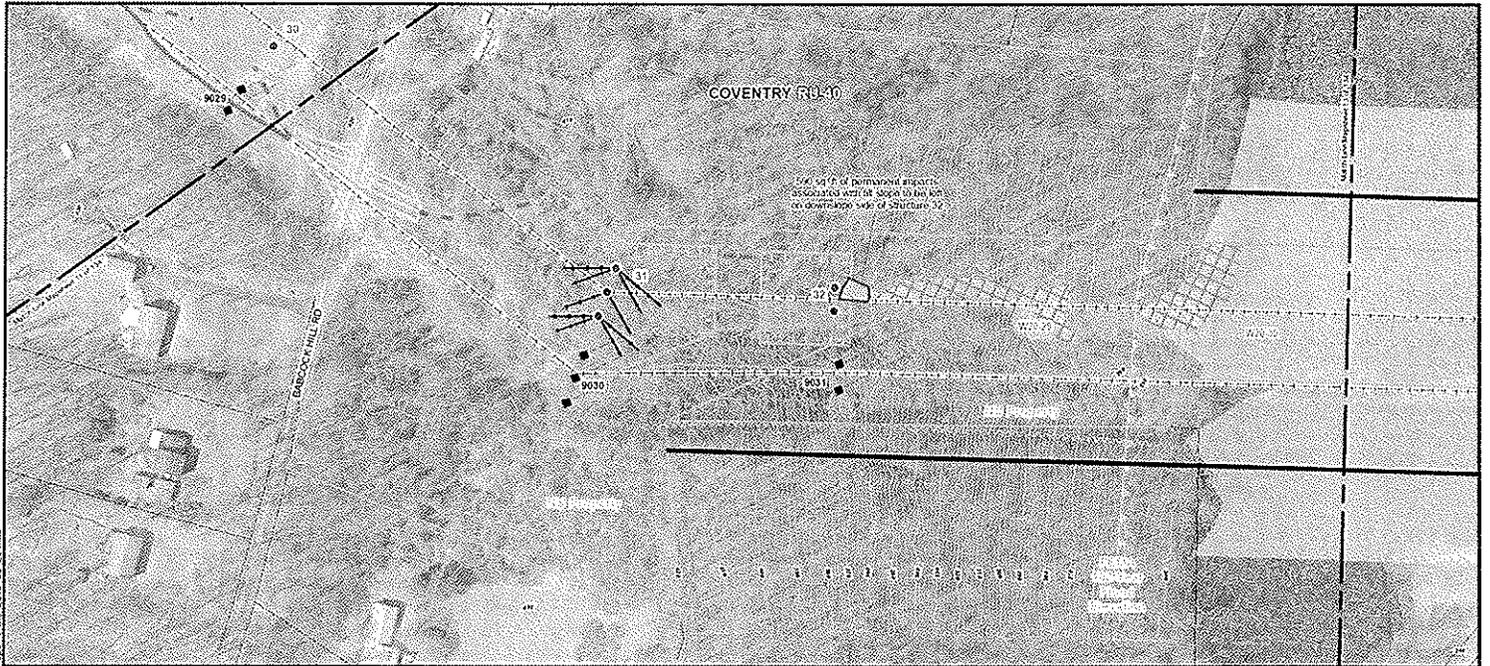
- Proposed Transmission Line
- Relocated Transmission Line
- Proposed Transmission Structure
- Distribution Structure to be removed
- New Access Roads
- New or Relocated Guy Wire & Anchor
- Temporary Work Pad
- Temporary Work Pad & Guard Structure
- Temporary Pulling Pad
- Temporary Road Flare
- Mix Span

WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

Watershed or Stream ID No.	Existing Water Resource Characteristics				Water Resource Impacts (PFO)				Forecasted Wetland Vegetation Clearing Settings (Temporary Projects)	
	PFO	Wetland	Stream	Other	Temporary	Permanent	Other	Acres	Feet	
W0229 W0230	Y	Y	Y	Y	500			534 662	012 013	

CONNECTICUT LIGHT AND POWER | INTERSTATE RELIABILITY PROJECT

Date: 1/28/2013 | Drawn: LD | Revised: 4/10/2015 | Mapsheet 12 of 134



- Existing Conditions**
- Existing Transmission Line
 - Existing RWY
 - Existing Transmission Structures
 - Existing Access Road
 - Wetland
 - State Wetlands
 - Perennial Stream
 - Intermittent Stream
 - Vertical Pool
 - Existing Tree Line
 - Not Forest
 - Property Lines
 - Zoning Description
- Proposed Conditions**
- Proposed Transmission Line
 - Replaced Distribution Line
 - Proposed Transmission Structure
 - ⊗ Distribution Structure to be removed
 - New Access Road
 - New or Replaced Guy Wire & Anchor
 - Temporary Work Pad
 - Temporary Work Pad & Guard Structure
 - Temporary Paving Pad
 - Temporary Road Edge
 - Mut. Span

WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

Existing Water Resource Characteristics				Water Resource Impacts (sq ft)				Forest Wetland Vegetation Clearing Summary (Secondary Impact)	
Special Use Stream (SUS)	Wetland (W)	Wetland (W) Type Code	Wetland (W) Flow Class	Temporary		Permanent		Acres E	Acres W
				Acres	sq ft	Acres	sq ft		
00030	FFO	FFO	LOW	0.00	0.00	0.00	0.00	0.00	0.00
00030	FFO	FFO	HIGH	0.00	0.00	0.00	0.00	0.00	0.00

Impacts

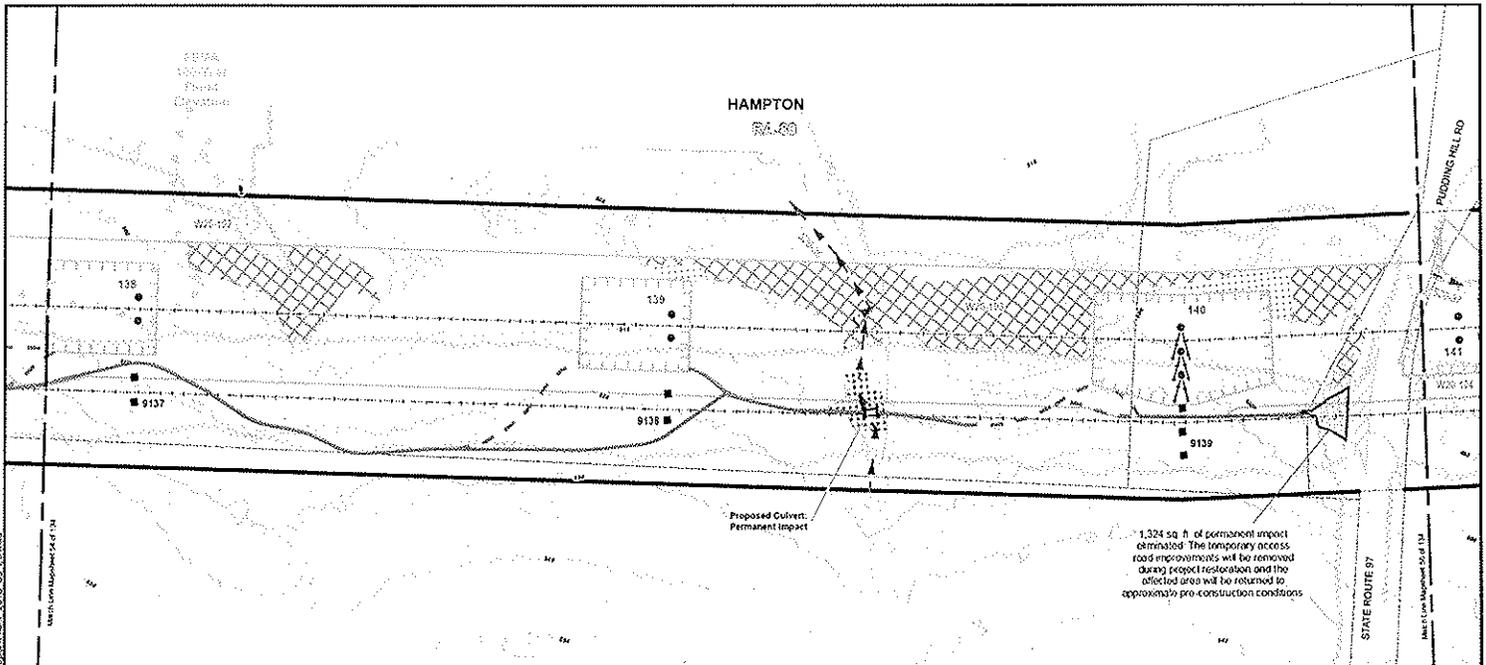
- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Grading Impact
- Temporary Work Area Clearing Impact

Prepared by
Burns & McDonnell
CONSULTANTS

Scale: 1 inch = 100 feet

DATE: 11/25/2013

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Map Location

Typical Cross Section

Impacts

- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Grading Impact
- Forested Wetland (PFC) Clearing

Connecticut Light & Power

Prepared by **Burns & McDonnell**

Scale: 1 inch = 100 feet

Existing Conditions

- Existing Transmission Line
- Existing ROW
- Existing Transmission Structures
- Existing Access Road
- Wetland
- State Wetland
- Potential Stream
- Intermittent Stream
- Wentz Pond
- Existing Tree Line
- RD Parcel
- Property Lines
- Zoning Description

Proposed Conditions

- Proposed Transmission Line
- Relocated Distribution Line
- Proposed Transmission Structure
- Distribution Structure to be removed
- New Access Road
- New or Relocated Guy Wire & Anchor
- Temporary Work Pad
- Temporary Work Pad & Guard Structure
- Temporary Pulling Pad
- Temporary Road Flare
- Mud Spill

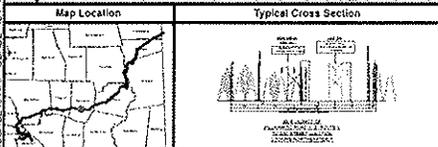
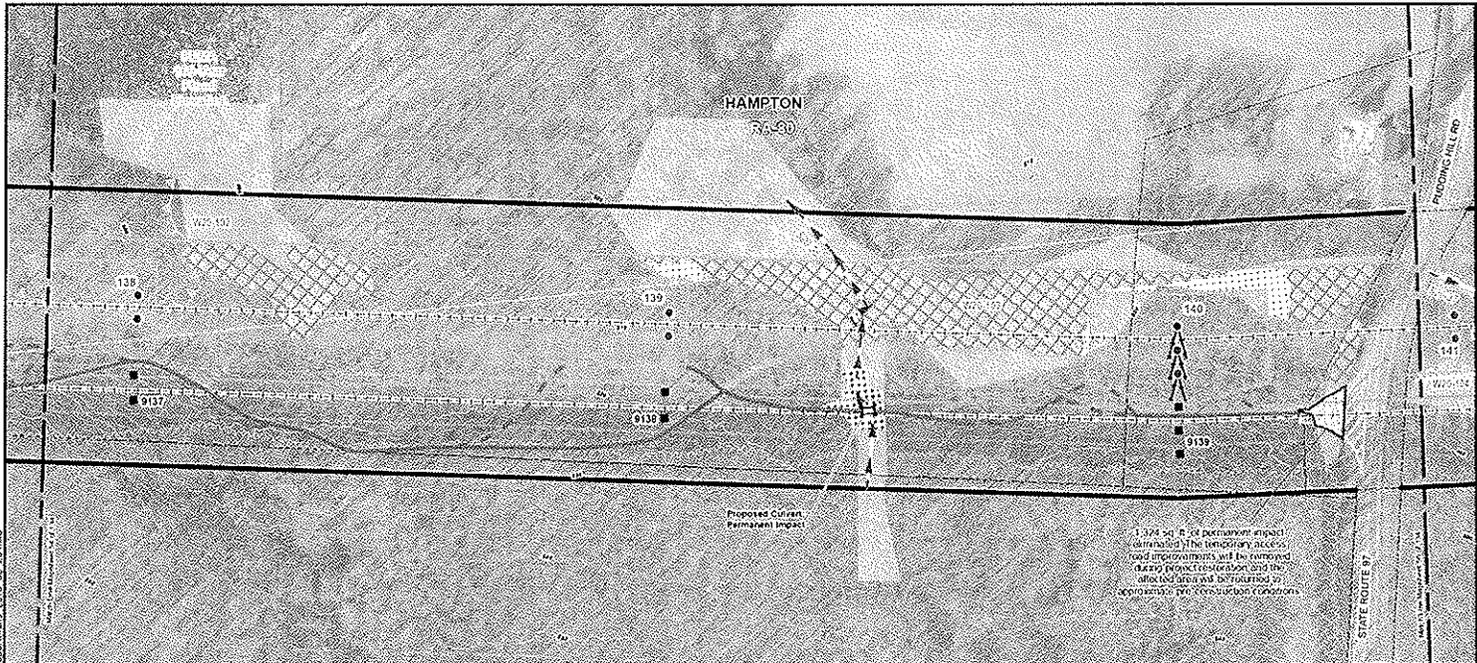
WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS

Stream ID #	Stream Name	Existing Water Resource Characteristics				Water Resource Impacts (sq ft)				Forested Wetland Vegetation Clearing Summary (Secondary Impacts)	
		Wetland or Stream	Wetland or Stream	Wetland or Stream	Wetland or Stream	Temporary	Permanent	Forested Wetland	Wetland or Stream		
W20-102	W20-102	PF	W20-102	W20-102	W20-102	104	0	0	0	0	0
W20-102 SW	W20-102 SW	PF	W20-102 SW	W20-102 SW	W20-102 SW	369	0	1324	0	243	30796
W20-102 SW 20A	W20-102 SW 20A	PF	W20-102 SW 20A	W20-102 SW 20A	W20-102 SW 20A	0	0	0	0	0	0

CONNECTICUT LIGHT AND POWER | INTERSTATE RELIABILITY PROJECT

Date: 11/25/2013 | DRAWN: LD | Revised: 4/13/2015 | Worksheet 05 of 121

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- | Existing Conditions | Proposed Conditions |
|---|---|
| <ul style="list-style-type: none"> Existing Transmission Line Existing ROW Existing Transmission Structures Existing Access Road Wetland Perennial Stream Intermittent Stream Wetland Existing Tree Line Red Flag Property Lines Zoning Description | <ul style="list-style-type: none"> Proposed Transmission Line Replaced Distribution Line Proposed Transmission Structure Structure to be removed New Access Road New or Replaced Guy Wire & Anchor Temporary Work Pad Temporary Work Pad & Guard Structure Temporary Pulling Pad Temporary Road Flare Net Span |

WATER RESOURCES: SUMMARY OF EXISTING CHARACTERISTICS AND POTENTIAL IMPACTS									
Existing Water Resource Characteristics					Water Resource Impacts (sq ft)				
Watershed or Stream (1:1 mi)	Number of Wetlands (1:1 mi)	Wetland Acres (1:1 mi)	Wetland Type	Wetland Code	Temporary		Permanent		Percent Wetland Vegetation Clearing Summary (Square Footage)
					Access Road	Clearing Foot	Structure Foundation	Access Road	
W00102	PROFESS	104	W00102	W00102	0	0	0	0	0
W00103	PROFESS	104	W00103	W00103	0	0	0	0	0
W00104	PROFESS	104	W00104	W00104	0	0	0	0	0
W00105	PROFESS	104	W00105	W00105	0	0	0	0	0
W00106	PROFESS	104	W00106	W00106	0	0	0	0	0
W00107	PROFESS	104	W00107	W00107	0	0	0	0	0
W00108	PROFESS	104	W00108	W00108	0	0	0	0	0
W00109	PROFESS	104	W00109	W00109	0	0	0	0	0
W00110	PROFESS	104	W00110	W00110	0	0	0	0	0
W00111	PROFESS	104	W00111	W00111	0	0	0	0	0
W00112	PROFESS	104	W00112	W00112	0	0	0	0	0
W00113	PROFESS	104	W00113	W00113	0	0	0	0	0
W00114	PROFESS	104	W00114	W00114	0	0	0	0	0
W00115	PROFESS	104	W00115	W00115	0	0	0	0	0
W00116	PROFESS	104	W00116	W00116	0	0	0	0	0
W00117	PROFESS	104	W00117	W00117	0	0	0	0	0
W00118	PROFESS	104	W00118	W00118	0	0	0	0	0
W00119	PROFESS	104	W00119	W00119	0	0	0	0	0
W00120	PROFESS	104	W00120	W00120	0	0	0	0	0
W00121	PROFESS	104	W00121	W00121	0	0	0	0	0
W00122	PROFESS	104	W00122	W00122	0	0	0	0	0
W00123	PROFESS	104	W00123	W00123	0	0	0	0	0
W00124	PROFESS	104	W00124	W00124	0	0	0	0	0
W00125	PROFESS	104	W00125	W00125	0	0	0	0	0
W00126	PROFESS	104	W00126	W00126	0	0	0	0	0
W00127	PROFESS	104	W00127	W00127	0	0	0	0	0
W00128	PROFESS	104	W00128	W00128	0	0	0	0	0
W00129	PROFESS	104	W00129	W00129	0	0	0	0	0
W00130	PROFESS	104	W00130	W00130	0	0	0	0	0
W00131	PROFESS	104	W00131	W00131	0	0	0	0	0
W00132	PROFESS	104	W00132	W00132	0	0	0	0	0
W00133	PROFESS	104	W00133	W00133	0	0	0	0	0
W00134	PROFESS	104	W00134	W00134	0	0	0	0	0
W00135	PROFESS	104	W00135	W00135	0	0	0	0	0
W00136	PROFESS	104	W00136	W00136	0	0	0	0	0
W00137	PROFESS	104	W00137	W00137	0	0	0	0	0
W00138	PROFESS	104	W00138	W00138	0	0	0	0	0
W00139	PROFESS	104	W00139	W00139	0	0	0	0	0
W00140	PROFESS	104	W00140	W00140	0	0	0	0	0
W00141	PROFESS	104	W00141	W00141	0	0	0	0	0
W00142	PROFESS	104	W00142	W00142	0	0	0	0	0
W00143	PROFESS	104	W00143	W00143	0	0	0	0	0
W00144	PROFESS	104	W00144	W00144	0	0	0	0	0
W00145	PROFESS	104	W00145	W00145	0	0	0	0	0
W00146	PROFESS	104	W00146	W00146	0	0	0	0	0
W00147	PROFESS	104	W00147	W00147	0	0	0	0	0
W00148	PROFESS	104	W00148	W00148	0	0	0	0	0
W00149	PROFESS	104	W00149	W00149	0	0	0	0	0
W00150	PROFESS	104	W00150	W00150	0	0	0	0	0

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10000 Old Derby Road
Derby, CT 06418

Impacts

- Permanent Road Impact
- Temporary Road Impact
- Temporary Work Area Grading Impact
- Proposed Wetland (P) or Clearing

Scale: 1" = 100' feet

North Arrow

Map Date: 11/7/2013